

Title (en)  
Integrated semiconductor memory with memory cells having ferroelectric memory effect

Title (de)  
Integrierter Halbleiterspeicher mit Speicherzellen mit ferroelektrischem Speichereffekt

Title (fr)  
Mémoire intégrée à semiconducteurs avec des cellules de mémoire ayant un effet de mémorisation ferroélectrique

Publication  
**EP 1126470 A3 20030205 (DE)**

Application  
**EP 01100917 A 20010116**

Priority  
DE 10005619 A 20000209

Abstract (en)  
[origin: JP2001283585A] PROBLEM TO BE SOLVED: To prevent change of memory contents caused by faulty voltage by connecting a column line and a charging line to a connection terminal 22 of a common power feeding potential GND in a non-active operation mode and in a common read-out amplifier or a driver circuit. SOLUTION: This integrated semiconductor memory is provided with a memory cell field having a ferroelectric memory effect memory cell MC, row lines WL1, and column lines BL1, the memory cell is inserted between one column line and a charging line PL1, the column line is connected to a read-out amplifier 2 from which an output signal S21 is taken, the charging line is connected to the driver circuit 3 connecting the amplifier 2 to a potential V1 and GND. and the column line and the charging line have an activation or a non-activation mode.

IPC 1-7  
**G11C 11/22**

IPC 8 full level  
**G11C 11/22** (2006.01); **H10B 20/00** (2023.01)

CPC (source: EP KR US)  
**G11C 11/22** (2013.01 - EP KR US)

Citation (search report)  
• [PX] EP 0994486 A2 20000419 - SHARP KK [JP]  
• [X] US 5892706 A 19990406 - SHIMIZU MITSURU [JP], et al  
• [XA] EP 0709851 A2 19960501 - NEC CORP [JP]  
• [A] US 5862089 A 19990119 - RAAD GEORGE B [US], et al  
• [A] DE 19832994 A1 20000127 - SIEMENS AG [DE]  
• [XA] HIROKI FUJISAWA ET AL: "THE CHARGE-SHARE MODIFIED PRECHARGE-LEVEL(CSM) ARCHITECTURE FOR HIGH-SPEED AND LOW-POWER FERROELECTRIC MEMORY", 1996 SYMPOSIUM ON VLSI CIRCUITS. DIGEST OF TECHNICAL PAPERS. HONOLULU, JUNE 13 - 15, 1996, SYMPOSIUM ON VLSI CIRCUITS, NEW YORK, IEEE, US, vol. SYMP. 10, 13 June 1996 (1996-06-13), pages 50 - 51, XP000639013, ISBN: 0-7803-3340-3

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